



Provided is a method, system, and program for performing an Input/Output (I/O) operation on an object during execution of a workflow comprised of nodes. A plurality of objects are stored in one of multiple data stores, wherein each object is identified within the data store with a first object identifier. A workflow packet references at least one object with a second object identifier, wherein the second object identifier indicates one of the data stores and the first object identifier of the referenced object in the data store. An I/O request for one target object referenced by one second object identifier in the workflow packet is received from one node. A determination is made from the second object identifier for the target object the data store and the first object identifier of the target object. The I/O request is performed on the target object at the determined first object identifier in the determined data store.